

HARISH G. NAIK

Argonne National Laboratory, 9700 S Cass Ave, Bldg. 240, Rm. 3156, Lemont, IL 60439

Phone: (630)-252-2029

Email: hnaik@mcs.anl.gov

Webpage: <http://www.mcs.anl.gov/~hnaik>

EDUCATION

- **University of Illinois at Chicago, Chicago, IL** Fall, 2008
M. S. in Computer Science
- **R. V. College of Engineering, Bangalore, INDIA** June, 2004
B. E. in Computer Science and Engineering

APPOINTMENTS

- **Mathematics & Computer Science Division, Argonne National Laboratory** Lemont, IL
Predoctoral Researcher: November 2008–Current
 - ZeptoOS (<http://zeptoos.org>)
 - COBALT, CIFS, Fault-Tolerance
- **Laboratory of Advanced Computing, University of Illinois at Chicago** Chicago, IL
Research Assistant: August 2007–May 2008
 - Worked as a research programmer on the RAY project.
- **Mathematics & Computer Science Division, Argonne National Laboratory** Argonne, IL
Research Aide(Summer Intern): May 2007– August 2007
 - Designing tools for *characterization & validation* of MPI implementations. The effort included understanding of the pattern of usage of message passing routines by application programmers. The project involved the usage empirical data and of statistical techniques like *curve-fitting* and *interpolation*.
- **SAP Labs** Bangalore, INDIA
Development Specialist: December 2004–August, 2006.
 - As a member of the Application Platform - Supply Chain Management group, I was responsible for design, development and maintenance of *Site Logistics - Bill of Operations* component. Responsibilities included development using the ABAP language and a coordinated effort with design and development teams in Germany and Israel.
- **i2 Technologies** Bangalore, INDIA
Associate Consultant: July, 2004–December, 2004.
 - As a part of the Supplier Relationship Management maintenance team, I was responsible for supporting i2's *Strategic Sourcing* product.

RESEARCH INTERESTS

- Parallel Programming Models, High Performance Computing (HPC), Operating Systems Design, Noise in High Performance Operating Systems, Network Congestion in HPC, Performance Measurement Techniques in HPC, Fault Tolerance in Scientific Software, Scientific Computing

JOURNAL PUBLICATIONS

- R. Gupta, **H. Naik** and P. Beckman, “**Understanding Checkpointing Overheads on Massive-Scale Systems: Analysis on the IBM Blue Gene/P System**” – *Accepted for publication in the International Journal of High Performance Computing Applications (IJHPCA)*, 2009
- K. Yoshii, K. Iskra, **H. Naik**, P. Beckman and P. C. Broekema, “**Performance and Scalability Evaluation of “Big Memory” on Blue Gene Linux**” – *Accepted for publication in the International Journal of High Performance Computing Applications (IJHPCA)*, 2009

CONFERENCE/WORKSHOP PUBLICATIONS

- P. Balaji, **H. Naik** and N. Desai, “**Understanding Network Saturation Behavior on Large-Scale Blue Gene/P Systems**” – *The 15th International Conference on Parallel and Distributed Systems (ICPADS’09)*, Shenzhen, China
- **H. Naik**, R. Gupta and P. Beckman, “**Analyzing Checkpointing Trends for Applications on Petascale Systems**” – *Second International Workshop on Parallel Programming Models and Systems Software (P2S2) for High-End Computing in conjunction with International Conference on Parallel Processing (ICPP)*, 2009
- K. Yoshii, K. Iskra, P. C. Broekema, **H. Naik**, and P. Beckman, “**Characterizing the Performance of Big Memory on Blue Gene Linux**” – *In “Proceedings of the 2nd Int. Workshop on Parallel Programming Models and Systems Software for High-End Computing,” Vienna, Austria, Sept. 2009.*
- **H. Naik**, “**A Neural Network Approach Towards Analysis And Prediction of Behavioral Patterns of Stock Markets**” – *IBM Technitks 2004, National Institute of Technology Karnataka, Surathkal, April 2004 - BEST PAPER*

THESIS

- **H. Naik**, “**Parallelization of Community Identification in Dynamic Social Networks using MPI**” – *M. S. Thesis, University of Illinois at Chicago, 2008.*

INVITED TALKS/CONFERENCE PRESENTATIONS

- Harish Naik, “**Computers in Bioinformatics and Computational Biology**” – *Govt. Arts & Science College, Karwar, India - January 2008*
- Harish Naik, “**Building Opensource Clusters**” – *R. V. College of Engineering, Bangalore, May 2005.*
- Harish Naik, Arjun Jain, “**3D Graphics Rendering using Linux Clusters**” – *Linux/Bangalore, December 2003.*

PROFESSIONAL MEMBERSHIPS

- Member, **Association for Computing Machinery**